

National Exposure Research Laboratory and New Jersey Department of Environmental Protection (NJDEP) Polyfluoroalkyl Substances Research (PFAS) Assistance Project

29 July 2016

**Background:** NJDEP plans to conduct research involving sampling of groundwater, surface water, and soils for PFAS contamination possibly associated with at least two RCRA sites. These sites are Solvay Solexis, a state lead RCRA site, and DuPont Chambersworks, a federal lead RCRA site. Both sites have historical PFAS wastewater discharges to the Delaware River and to on-site groundwater, and they have potentially discharged PFAS via air emissions. Solvay Solexis primarily discharged PFNA and is about 20 miles further north (up-river) from DuPont, which has primarily discharged PFOA and other PFAS. Due to the variety of PFAS sources and complicated hydrology, NJDEP wishes to sample and better characterize the extent and potential sources of PFAS contamination in the area. The main focus of this effort would be to evaluate PFAS contamination in water and soil samples around the Solvay facility and to help determine if uncharacterized airborne emissions have impacted communities downwind of this plant.

**Request:** NJDEP would like to collaborate with the EPA Office of Research and Development (ORD) National Exposure Research Lab (NERL) to utilize NERL's expertise and experience with PFAS characterization and analysis. NJDEP will be performing all the sample collection, based on a sampling plan designed with input from EPA's cleanup programs and ORD. NJDEP will send approximately 50 – 60 water samples and 20 soil samples to NERL for targeted and nontargeted analysis of PFAS. NJDEP plans to start sampling in August. NERL's goals include direct assistance to state and Regional authorities to further document areas with known PFAS contamination, gather data to evaluate the extent of potential impacts from historical airborne emissions, and to evaluate soil and water samples for the presence of previously undescribed "emerging" PFAS. This work is covered under existing RAPs (6.02) and will lead to peer-review journal articles that will expand our understanding of PFAS transport mechanisms, exposure pathways, and help advance 'finger-printing' PFAS contamination to specific sources.

**OLEM HQ Consultation Response:** HQ believes this collaborative research could provide valuable information, not only for these sites, but for characterizing PFAS waste sites in general. We support this collaboration and would like to be kept informed of the project and its results. In particular, to ensure consistency with the Agency approach for addressing PFAS sites, OLEM wishes to be kept informed of the results of any analysis performed by ORD and how those results will be reported.